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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,797	02/24/2004	Mark H. Yim	A4052-US-NP	3350

7590 04/21/2006

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EXAMINER

THOMPSON, HUGH B

ART UNIT	PAPER NUMBER
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3634

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/786,797

Applicant(s)

YIM ET AL.

Examiner

Hugh B. Thompson II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-27 is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2-24-04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, line 9, there is no structural relationship between the latching mechanism and any other portion of the apparatus. Correction is required. The phrase “and/or” is improper and should be removed.

With respect to claim 13, it is unclear with respect to what the sensor is attached or what type/relative to what structure engagement is sensed.

With respect to claims 14-16, “not less than” should read –at least--. Claims 21 and 22 recite a similar ambiguity.

With respect to claims 17-20, the controller is not associated with any structure or element of the apparatus. The applicant needs to recite some sort of structural relationship between the controller/software and the other elements of the apparatus.

With respect to claim 21, there is no antecedent basis for the “two clamps.”

With respect to claim 23, it is unclear relative to what the outward rotating movement of the actuator is referenced. The actuator needs to be attached to some element of the apparatus and oriented accordingly.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-12, 21, and 22, are rejected under 35 U.S.C. 102(b) as being anticipated by Riccio #2,731,223. Riccio discloses an articulated support assembly for a vertical structure 76 comprised of gripping mechanisms/clamps 6, the gripping mechanisms having gripping portions/side segments/center segments 68, 70, 72, of uniform and variable width portions (rectilinear and curved shapes), latch portions 54, and articulated links 4 that are pivotally attached to one another at end portions 50 and to the gripping mechanisms at 88 (pivot point/extensions).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 13-20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paris #5,213,172 in view of Riccio as advanced above. Paris discloses an automated climbing assembly comprised of gripping mechanisms 3, 4, a gripping actuator, as recited in column 3,

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lines 2-18, links 5, 5a, position/element sensors, which are used to locate and detect portions of the vertical structure M, P, as the climbing assembly ascends M, and a CPU/controller (inherently programmable and controllable from remote locations) that allows for selective control of the assembly as it moves along M, P. Riccio fails to disclose links mutually attached and operatively attached to the gripping mechanisms.

Riccio, as advanced above, teaches the utility of an articulated link arm assembly 4, attached to gripping mechanism 6, the arrangement permitting for articulated movement of the gripping mechanisms along the vertical structure 76. Therefore, to one of ordinary skill in the art, it would have been obvious to provide the climbing assembly of Paris with mutually attached link arms as taught by Riccio, so as to permit articulated movement of the arms along a vertical structure, while producing no new and unexpected results.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riccio as applied to claims 1, 13-20, and 23 above, and further in view of Castelli #2,009,474. Riccio fails to disclose a layered coating on the gripping portion. Castelli teaches the utility of a layered/sheathed rubber coating 22 for a tree/pole climber 1, 11, 21, used to protect and enhance grip of the climber against pole 23. Therefore, to one of ordinary skill in the art, it would have been obvious to provide the climbing assembly of Paris with a layered/sheathed rubber coating as taught by Castelli, so as to protect and enhance the grip of a climber against a vertical structure.

***Allowable Subject Matter***

Claim 25 is allowed.

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Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The primary reason for the allowable subject matter of claim 24 is the inclusion of the actuator that varies length of the gripping portion.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Flor #1,924,033, Hillquist et al #3,417,953, Riblet #2,854,293, Hatfield #6,957,515, Kolb #6,315,259, and Chadwick #5,170,975 are cited to teach articulated gripping assemblies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hugh B. Thompson II whose telephone number is (571) 272-6837. The examiner can normally be reached on Monday thru Friday 9 am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hugh B. Thompson II  
Primary Examiner  
Art Unit 3634

April 17, 2006